and unchangeable. Timely data refer to data that can be measured in enough time to be effectively used. Simple data refer to data that are easy to understand. Economic data refer to data that can be obtained within the budget constraints for data collection. Unchangeable data refer to data that cannot be easily distorted to provide different information.

Four-Block

Selecting the metrics is important; but, using the metrics is more important. For the NECDF project, a simple four-block page was developed to help the project manager use the metric in managing the project. Figure 2, which is an example of a four-block page for the scheduling area, communicates important project information. This page can be used for each of the critical areas on the project, such as the nine areas previously mentioned.

The first block is a graphical or other depiction of the primary metric from this area. This is the metric that provides the manager a proactive indication of the status of the project for this area. The primary metric for this example is the schedule status using a dual graphic indicating both the number of activities planned for the month and the actual number (in percentage) of those activities accomplished by month.

The second block is another metric that provides more in-depth information about the primary metric in a systematic attempt to prioritize the areas of concern. In this example, the Pareto Chart is used as a method to identify the cause of the schedule misses for the current month, grouped into common areas. This is a useful tool to help prioritize the areas for the manager.

The third block is a textual list of the top issues or concerns for the area, such as scheduling in this example. This list can flow directly from the second block, which is the case in this example, or it can come from the individual maintaining the metric by using other sources of information.

The fourth block is the most important block, as this block identifies the action plan for improving the performance of the project. It should clearly identify the individual responsible for the action and the suspense date for that action.

Dashboard

The dashboard, which is similar to the one used in an automobile, has the intent of showing managers the status of their projects in a quick glance. Just like the speedometer on a car's dashboard, which gives a valid metric on the "real-time" speed of the car, a project performance metric should provide useful and timely information to managers.

Figure 3 is an example of this single-page dashboard. For the nine areas previously mentioned, a dashboard is constructed using the metric from the first block shown in Figure 2. Additionally, a visual status is used to provide a quick visual representation of the performance of each area on the project, which was represented by a RAG (Red, Amber, Green) status for each of the nine areas in this example. This status highlights areas in which managers need to pay special attention. For example, a green status indicates that that area is doing fine; whereas, a red status indicates that that area is failing to meet the project objectives.

Swamped With Data No More

Project managers are responsible for the outcome of their projects. They normally base their decisions upon data and information obtained, or lack thereof. The effective use of performance metrics and the prioritization of that data help managers in managing their projects. Failure to use effective metrics will foster a situation in which managers are swamped with data, most of which has no effect on the success or failure of the project.

For the NECDF project, this methodology has significantly helped the project management team focus its attention and especially its scarce resources upon the critical issues.

Editor's Note: Haraburda welcomes questions or comments on this article. Contact him at scott.haraburda@necdf.necd.army.mil.

DAU AND DMO SIGN STATEMENT OF PRINCIPLES

The Defense Acquisition University (DAU) and Defence Materiel Organisation, Embassy of Australia, Washington D.C., signed a Statement of Principles (SOP) on Oct. 30, 2002, to provide a framework for continuous cooperation in the field of acquisition training. Signing the SOP from left: Frank Anderson Jr., DAU President; and Michael Roche, Under Secretary of Defence Materiel, Australian Department of Defence, Embassy of Australia. Standing from left: Richard Kwatnoski, Office of the Secretary of Defense for Acquisition Technology and Logistics, International Chair; and David Fitch, Dean, Defense Systems Management College.

Photo courtesy Embassy of Australia